

Report to: The Chief Officer (Highways and Transportation)

Date: 14 April 2015

Subject: Design and Cost Report for the Pedestrian Crossing Review 2015

Capital Scheme Number: 32270 / 000 / 000

Are specific electoral Wards affected? If relevant, name(s) of Ward(s):	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Are there implications for equality and diversity and cohesion and integration?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Is the decision eligible for Call-In?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does the report contain confidential or exempt information? If relevant, Access to Information Procedure Rule number: Appendix number:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Summary of main issues

- 1 This report is aimed at supporting the Council's Best Council objective 'becoming an efficient and enterprising council', in that this report recommends a change in our approach and processes to deliver schemes identified from the Annual Pedestrian Crossing Review.
- 2 The aim of this report is to obtain the Chief Officer's Approval in Principle for the results of this year's pedestrian Crossing Review, as well as an approval for implementation for schemes to be progressed in the annual programme. This new approach will enable authorisation of the annual programme in one holistic report, which is a more cost effective and economical way to deliver the programme and will minimise unnecessary delays in the process. This new initiative will be reviewed throughout the year to ensure the anticipated benefits are achieved.
- 3 This report summarises the results of the annual Pedestrian Crossing Review, and puts forward proposals for safe crossing facilities where these are justified by demand arising from pedestrian movements, particularly those of vulnerable users: children, older people and disabled people; and where traffic volumes or the complexity of crossing, in conjunction with accident records, would justify the provision of formal measures.

- 4 The report also includes recommendations for sites which do not meet the criteria for the provision of a formal crossing, but where crossing opportunities for pedestrians can be improved by the introduction of some informal measures.
- 5 The report includes recommendations for sites to be provided with appropriate pedestrian and cyclist facilities as part of externally funded schemes.
- 6 This report then seeks approval to agree and authorise the preparation and delivery of a programme of works identified by the Annual Pedestrian Crossing Review and (unless otherwise indicated) funded from the Local Transport Plan from the 2015-16 financial year.

7 Recommendations

The Chief Officer (Highways and Transportation) is requested to:

- i) note the contents and recommendations of this report and the procedures carried out in respect of conducting the annual pedestrian crossing review;
- ii) review and approve the recommendations of the Annual Pedestrian Crossing Review as the basis for the 2015/16 programme for introducing new pedestrian crossings; and give authority to commence the detailed design, consultation and implementation of the schemes described in Appendix B at a cost of £320,000;
- iii) give authority to incur expenditure of £320,000 inclusive of any legal fees, staff fees and works costs which will fully funded from the Local Transport Plan Transport Policy Capital Programme.
- iv) give authority to display a notice on site under the provisions of Section 23 of the Roads Traffic Regulation Act 1984 in order to inform the public of the proposed pedestrians crossings; and
- v) give authority and to request the City Solicitor to draft and advertise a Notice under the provisions of Section 90C of the Highways Act 1980 for the implementation of speed tables to compliment some of the proposed pedestrian crossings; and
- vi) to receive such other further reports as may be needed to address any objections received to advertised Notices or other matters arising from the detailed scheme proposals; and
- vii) agree the recommendations in respect of the provision of externally funded crossing facilities.

1 Purpose of this report

- 1.1 This report summarises the results of the Annual Pedestrian Crossing Review which considers requests for crossing facilities submitted in 2014 – 15, and seeks approval for the recommended sites to be included in the programme. This report also seeks approval to agree and authorise the preparation and delivery of these

recommended works from the Local Transport Package during the year 2015-2016.

2 Background information

- 2.1 Busy roads and fast moving traffic can form a barrier to communities preventing neighbourhood interaction and access to local facilities, as well as being an impediment to journeys by foot and by bicycle. Some road users, in particular child pedestrians, elderly people and people with disabilities, can find crossing a busy carriageway particularly difficult. They are also much more vulnerable to the risk of serious injury as the result of a road traffic collision.
- 2.2 During the course of each year requests for the provision of new pedestrian crossings are received from members of the public and elected members. In order to prepare recommendations for a programme for the installation of new crossings, all such requests are investigated and the results collated and analysed. Feedback is then provided to those that requested the crossing.
- 2.3 This review has been conducted in line with the agreed guidelines (revised in August 2008 and summarised in Appendix 2) and a site assessment process which takes account of the range of sites and circumstances where crossings are requested. It allows recommendations to be made where a clear and defined pedestrian desire line exists, combined with a heavy traffic flow, as well as for the less busy sites where a zebra crossing or alternative measures may be a more appropriate and effective means of meeting pedestrian needs.
- 2.4 Where installed appropriately, pedestrian crossings form an important element in improving road safety and preventing casualties, particularly for vulnerable road users such as child and elderly pedestrians. Whilst light controlled crossings are generally more appropriate on busier and faster roads, zebra crossings can provide safe facilities where speeds are lower and can achieve reduced pedestrian delay. Overall, where used appropriately, they have achieved safety records just as good as equivalent light controlled crossings. The following key factors underpin the evaluation and recommendations made for every site studied:
- The ease with which a pedestrian can currently cross the road;
 - Whether a crossing site is on a pedestrian desire line and would be used regularly;
 - Whether a crossing would be the most appropriate road safety measure or whether other measures are more suitable; and
 - Other relevant factors, such as the number of children, elderly and disabled people crossing, proximity of schools, sheltered accommodation, community facilities, bus stops, shops and other attractors.
- 2.5 The results of the assessment and recommendations are summarised in Appendix 1.

3 Main issues

- 3.1 Following the review process, crossing facilities are recommended at the following sites, which will form the basis for the Local Transport Plan funded delivery programme.

Site Location	Information and Justification
1) A65 New Road Side, Rawdon	<p>This location is close to Littlemoor Primary school and on route to Benton Park secondary school. Consequently the numbers of vulnerable pedestrians at the start and end of the school day are high. The majority of pedestrians crossing at this location are schoolchildren, some of whom use a nearby Park and Stride. The provision of a signal controlled crossing would help facilitate walking journeys to schools, and has the potential to assist with access to bus stops and the nearby Children's Centre and community hall.</p> <p>Recommended: Pelican</p>
2) A642 Leeds Road, Oulton	<p>This crossing is to assist children attending Royds School, located just off the busy A road. There are currently two refuges near Oulton Drive, which are used by some children, but the majority of those crossing do so further along Leeds Road, north of the roundabout junction with Methley Lane, where they cross two lanes of busy traffic on the central reservation. A formal crossing facility would help focus the crossing movements, which are currently spread out along a length of Leeds Road, in one location.</p> <p>Recommended: Pelican</p>
3) A642 Wakefield Road at the junction with Oulton Drive	<p>This location currently has a narrow pedestrian refuge. The refuge is mainly used by schoolchildren on the journey to and from school, and also several times a week during the school hours when the children walk for PE classes at the local sports centre. Because of the high number of children crossing together, the refuge does not adequately meet their needs.</p> <p>Recommend: Zebra crossing</p>
4) Princes Avenue, Roundhay	<p>The existing Zebra crossing does not cater sufficiently for high numbers of pedestrians at this location given high volumes of traffic. A signal controlled crossing would give consistent provision along this section of Princes Avenue and improve road safety.</p> <p>Recommended: Upgrade the existing Zebra to a Pelican</p>
5) Swinnow Road,	<p>A formal crossing is needed to assist with access to Bramley Railway</p>

- Swinnow Station (outbound platforms). There is no footway provision under the railway bridge on the east side of Swinnow Road, and the number of vehicles and proximity of other junctions increase the difficulty of crossing. Swinnow Road is also a length for concern, with a recent pedestrian fatality close to the proposed crossing; the Zebra would form a part of a road safety scheme at this location.
- Recommended: Zebra
- 6) Beeston Road Beeston Road is a busy local distributor, with traffic often queuing in the rush hour, with few formal crossing facilities. This stretch of road houses small businesses and takeaways, generating crossing demand throughout the day. The site has a history of accidents, including injury accidents to pedestrians and a fatality within the last five years;
- Recommend: Zebra
- 7) Broadway/ Fink Hill The wide mouth of the junction, narrow footways and parking are making crossing here difficult. There are housing and amenities on both sides of Fink Hill. Low pedestrian count may reflect pedestrians crossing away from the junction given the difficulty of judging turning movements. This site has a history of accidents, including pedestrian casualties (4). RNIB have supported a request for a formal crossing at this location.
- 8) Harehills Avenue Recommended: Pedestrian phase at this signal controlled junction There is a clear demand for a crossing here, especially from children as a crossing would aid access to the local park. The number of vehicles is low, but the difficulty of crossing is increased by the proximity of a relatively busy junction. There is already a speed table present, so the provision of a Zebra crossing would be a very cost-effective way of helping children access the local park. The site has a history of collisions, including 2 child pedestrian casualties and two cyclists.
- Recommended: Zebra
- 9) Coal Road, Whinmoor (near the junction with Naburn Approach) This location is close to community facilities (community centre, library, post office and two primary schools) and residential housing. Coal Road forms a barrier separating residents from facilities, and the volume and speed of traffic create a difficulty in crossing.
- Recommend: Zebra
- 10) Deighton Road, Wetherby This location is on a busy B road close to the junction with York Road, between well used garage/ minimarket and bus stops, and serves a large residential area and a sheltered housing complex. There is a strong presence of vulnerable pedestrians, in particular children but also older people, and the proximity of the junction with York Road creates complex crossing pattern.
- Recommended: Zebra crossing
- 11) Henconner Lane This site is very well used by parents and children on their journey to

school. Informal facilities in existence (build out and red surfacing) do not sufficiently meet demand.

Recommended: Zebra

Note: Where a Pelican/Toucan is recommended, this may include any signal controlled crossing as appropriate.

- 3.2 The following sites have been investigated and, whilst they do not meet the criteria for a formal crossing, have other forms of improvement recommended:

Site Location	Information and Justification
12) Wakefield Road, Stourton	<p>This location experiences demand from pedestrians for a very short time period only – between 0730 and 0900 – and it is apparent that the majority of pedestrians cross on the journey between bus stops and employment sites. Although vehicular flows are relatively high, as the numbers of pedestrians are low and there is no evidence of vulnerable pedestrians (no children or older people) an informal facility is recommended.</p> <p>Recommended: Subject to feasibility, provision of a refuge to aid pedestrian movements.</p>
13) High Street, Boston Spa	<p>The high street in Boston Spa is part of an A road which, despite the new A1M link, still carries considerable volumes of traffic. The West end of Boston Spa has a number of community facilities, including a children’s centre, a community centre and an outdoor recreational area – there is also an area of bungalows offset from the main road with predominantly older and disabled residents. The High Street lacks any provision for pedestrians crossing before the very heart of Boston Spa, and pedestrian movements are dispersed due to a degree to the crossing difficulties.</p> <p>Recommended: Refuges and/ or build-outs to aid pedestrians movements</p>
14) Otley Old Road, Adel	<p>Otley Old Road has a mixture of features to facilitate pedestrian movements across, consisting of Zebra crossings, signal controlled crossings and pedestrian refuges. The length between Spen Lane and New Adel Lane does not have the benefit of any crossing facilities yet the footway on one side of Otley Old Road is discontinued. A crossing point at this location would improve the safety and comfort of pedestrians compelled to cross and would give better access to bus stops and local facilities on the corner of Spen Lane.</p> <p>Recommended: Subject to feasibility, provision of informal measures to aid pedestrian movements.</p>

- 15) Church Lane/ Parkside Road Despite relatively low vehicular flows on the separate arms, this location gives some crossing difficulty as it is located on a mini roundabout. The location was subject to a recent deputation form concerned residents, and was also highlighted as difficult to negotiate by a wheelchair user residing in a nearby independent living complex.

Recommended: Subject to feasibility, provision of refuges to aid pedestrian movements.

- 3.3 There are two requests for pedestrian crossing facilities which are likely to be provided with a developer contribution: at Oxford Road in Guiseley and on Well Hill in Yeadon. The site at Oxford Road will serve as a link between the busy railway station and the town centre; the Well Hill site will link a proposed supermarket to the centre of Yeadon where there is a considerable crossing difficulty due to busy traffic and junction movements.
- 3.4 A crossing has also been requested at the junction of Stonegate Road and Street Lane, where a formal facility would be appropriate given the complex layout of the junction and its proximity to a busy roundabout and a high proportion of vulnerable pedestrians. However, the junction will be signalised as part of the works associated with the East Leeds Orbital Road (ELOR). As the timing of these works and the final shape of the junction are yet to be determined it is proposed to postpone the decision on the provision of a pedestrian crossing until next year, to maximise the use of resources.
- 3.5 A number of sites are recommended for further study to better ascertain the levels of pedestrian demand where this is likely to vary throughout the year. These locations include Meanwood Road and Grove Lane where they intersect the Meanwood Valley Trail and where representations for the introduction of crossing facilities have been made. A feasibility study is also proposed for the junction of Harrogate Road and Stainbeck Lane. The study will examine options for the design of the crossing that would seek to reconcile various conflicting needs, especially in view of the potential development at an adjacent site, while catering for the existing pedestrian desire lines.
- 3.6 It is intended that those crossings in Section 3.1 and 3.2 will form a part of the 2015 -16 Integrated Transport Capital programme.

4 Corporate Considerations

4.1 Consultation and Engagement

- 4.1.2 No external consultations have been undertaken in respect of this report at this stage. The majority of the schemes in the proposed programme have originated from local communities; either from Ward Members, local residents or businesses. At this stage the detail and prioritisation has been assembled with input from the relevant officers from the Highway and Transportation service disciplines, but as

the works programme develops, consultation on individual projects will be carried out as appropriate.

- 4.1.3 Subject to approval of the programme, each individual scheme will be subject to full consultation with Ward Members, local residents and businesses (as appropriate) prior to final detailed scheme being progressed. This will include any relevant statutory process, such as 90C notice and where any objections are received, these will be formally reported to the Chief Officer (Highways and Transportation).

4.2 Equality and Diversity / Cohesion and Integration

- 4.2.4 The Pedestrian Crossing Review process has been subject to an Equality Impact Assessment (EDIA). The Assessment identified positive impacts of the provision of pedestrian crossing facilities on local people and communities generally but, in particular; on older and younger people, pregnant women, people with children and disabled people. It also highlighted the need to continue to consider the needs of these equality groups and to ensure the transparency of the decision making process.
- 4.2.5 If a site does not meet the criteria for formal crossing facilities, the lack of such facility may impact most on children and elderly/ disabled people. Elderly and disabled people may be the most affected as they will find it more difficult to walk and cross at an alternative location, and will require additional time to cross. Blind people may also find it difficult or lack confidence to cross a busy carriageway without a dedicated facility. Children are less likely to be able to judge the speed of traffic and child pedestrians form a significant proportion of those killed or seriously injured in traffic collisions (36% nationally). The presence of the above type of users is recorded and weighs on the consideration as to whether a formal facility should be provided.
- 4.2.6 The lack of appropriate facilities to cross a busy road may also have a greater impact on disadvantaged communities (and on women and children in particular), as they are less likely to have access to a car and are more likely to walk, thus being more exposed to the negative effects of traffic.
- 4.2.7 The recommendations of the EqIA include:
- Having regard for road safety records and analysis;
 - Consultations on individual sites, which do meet the criteria for provision, at the detailed design stage in order to determine and overcome any potential negative impacts;
 - Further study to be undertaken at more marginal locations where there is a significant proportion of vulnerable pedestrians and where difficulty of crossing/ road safety history justifies this;
 - Continuing to note and give consideration to the needs of disabled people when recommending sites for the provision of a crossing.

- Ensuring transparency in the decision making process.

4.2.8 The needs of elderly people, children and disabled people were weighed in the assessment process in favour of providing a formal facility at several sites noted throughout the report.

4.3 Council policies and City Priorities

4.3.1 The Best Council Plan 2013-17 outlines how Leeds City will achieve its ambition to become the Best City in the UK and Leeds City Council the best local authority. According to the Best Council Plan, the success of the Best Council objective: ensuring high quality public services, will be partly measured through reduced numbers of people Killed or Seriously Injured on the city's roads. By providing safe pedestrian crossing facilities where justified, the Pedestrian Crossing Review will contribute to this objective being achieved. As children are ranked amongst the most vulnerable road users, the provision of safe crossing facilities where there is demand from children will help facilitate active modes of travel on journeys to school, and contribute to the following policy objectives:

- Leeds Education Challenge, which is part of the Child Friendly city objective,
- the Better Lives programme;
- "Public Health which is embedded and effectively delivering health protection and health improvement".

4.3.2 By providing safe pedestrian crossing facilities where justified, the Pedestrian Crossing Review will help achieve Leeds' ambition to become the Best City by reducing the number of pedestrians killed or seriously injured on city's roads, by fostering links between the communities and local facilities, especially where the highway forms a considerable barrier, and by enabling more sustainable travel choices for local journeys, including for new developments within the city.

4.4 Resources and value for money

4.4.1 The proposed pedestrian crossings are estimated to cost £320,000 inclusive of any legal fees, staff fees and works costs which will be fully funded from the Local Transport Plan Transport Policy Capital Programme, in accordance with priorities and budget provision set out in the Local Transport Plan 3.

Funding Approval :	Capital Section Reference Number :-						
Previous total Authority to Spend on this scheme	TOTAL	TO MARCH 2015	FORECAST				
	£000's	£000's	2015/16	2016/17	2017/18	2018/19	2019 on
			£000's	£000's	£000's	£000's	£000's
LAND (1)	0.0						
CONSTRUCTION (3)	0.0						
FURN & EQPT (5)	0.0						
DESIGN FEES (6)	0.0						
OTHER COSTS (7)	0.0						
TOTALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Authority to Spend required for this Approval	TOTAL	TO MARCH 2015	FORECAST				
	£000's	£000's	2015/16	2016/17	2017/18	2018/19	2019 on
			£000's	£000's	£000's	£000's	£000's
LAND (1)	0.0						
CONSTRUCTION (3)	232.0		232.0				
FURN & EQPT (5)	0.0						
DESIGN FEES (6)	74.0		74.0				
OTHER COSTS (7)	14.0		14.0				
TOTALS	320.0	0.0	320.0	0.0	0.0	0.0	0.0
Total overall Funding (As per latest Capital Programme)	TOTAL	TO MARCH 2015	FORECAST				
	£000's	£000's	2015/16	2016/17	2017/18	2018/19	2019 on
			£000's	£000's	£000's	£000's	£000's
LCC Supported Borrowing	0.0						
Revenue Contribution	0.0						
Capital Receipt	0.0						
Government Grant - LTP	320.0		320.0				
Any Other Income (Specify)	0.0						
Total Funding	320.0	0.0	320.0	0.0	0.0	0.0	0.0
Balance / Shortfall =	0.0	0.0	0.0	0.0	0.0	0.0	0.0

4.5 Legal Implications, Access to Information and Call In

- 4.5.1 There are no legal implications for the contents of this report. The report is eligible for call-in as it affects multiple wards.

4.6 Risk Management

- 4.6.1 All the schemes will be safety audited in order to ensure that any consequential accident risks arising from the siting of a new pedestrian crossing are addressed through careful design and appropriate siting of the facilities. Completed schemes will then be monitored.

5 Conclusions

- 5.1 The Pedestrian Crossing Review 2015 reviewed 68 sites where crossing facilities were requested, and put forward ten sites to be funded through the West Yorkshire Local Transport Plan where sites either meet the criteria as detailed in Appendix 2, or where the presence of particularly vulnerable pedestrians, i.e. disabled people, children and elderly people, results in added difficulty of

crossing. It is hoped that these will help overcome some of the barriers to journeys on foot.

- 5.2 Approval to the development and delivery of the overall programme as detailed in this report will enable schemes to be delivered in a timely and efficient manner and will produce positive outcomes for road safety, businesses and communities.

6 Recommendations

6.1 The Chief Officer (Highways and Transportation) is requested to:

- i) note the contents and recommendations of this report and the procedures carried out in respect of conducting the annual pedestrian crossing review;
- ii) review and approve the recommendations of the Annual Pedestrian Crossing Review as the basis for the 2015/16 programme for introducing new pedestrian crossings; and give authority to commence the detailed design, consultation and implementation of the schemes described in Appendix B at a cost of £320,000
- iii) give authority to incur expenditure of £320,000 inclusive of any legal fees, staff fees and works costs which will fully funded from the Local Transport Plan Transport Policy Capital Programme.
- iv) give authority to display a notice on site under the provisions of Section 23 of the Roads Traffic Regulation Act 1984 in order to inform the public of the proposed pedestrians crossings; and
- iv) give authority and to request the City Solicitor to draft and advertise a Notice under the provisions of Section 90C of the Highways Act 1980 for the implementation of speed tables to compliment some of the proposed pedestrian crossings; and
- v) to receive such other further reports as may be needed to address any objections received to advertised Notices or other matters arising from the detailed scheme proposals; and
- vi) agree the recommendations in respect of the provision of externally funded crossing facilities.

7 Background documents¹

7.1 None

¹ The background documents listed in this section are available to download from the Council's website, unless they contain confidential or exempt information. The list of background documents does not include published works.

Appendix 1 – Site specific recommendations

Site location	All Day Activity		2 hour peak (per hour)		PV2 value (All Peds) 2hr	Assists School Journey	Assessed Category	Accidents	Recommendation
	Pedestrian Flow (2 way)	Traffic Flow (2 way)	Pedestrian Flow	Traffic Flow					
	0700-1900								Pelican
A642 Leeds Road/ Methley Roundabout; Rothwell	91	21,067	37	1940	1.3	yes	A	3 slight, 1 serious, 1 fatal, no pedestrians involved	
Wakefield Road, Stourton; City and Hunslet	249	14,087	56	1516	1.72	no	C	1 Loss of control (2 slight injuries) 1 FTGW from petrol station. (3 slight injuries) None pedestrian related.	Refuge
A65 New Road Side, Rawdon; Guiseley and Rawdon	236	13,555	112	1234	1.57	yes	A	None	Pelican
A6120 Broadway/ Fink Hill, Horsforth	155	22,060	24	2073	0.90			7 accidents, 2 serious, 4 involving pedestrians	Pedestrian phase on signal controlled junction
Princes Avenue, Roundhay	470	11,827	110	938	0.74		A	4 slight - no pedestrian related	Pelican
Henconner Lane, Farnley and Wortley	415	8329	138	802	0.73	yes	B	None	Zebra
Swinnow Road; Bramley and Stanningley/ Armley	435	9779	59	978	0.71		B	2 slight 1 serious and 1 pedestrian fatality	Zebra

Beeston Road; Beeston and Holbeck	543	8111	70	852	0.51		B	6 accidents, 3 slight, 2 serious and 1 fatal. 2 slight accidents involved pedestrians crossing.	Zebra
A642 Wakefield Road/ Oulton Drive; Rothwell	105	13189	35	1313	0.55	yes	B	4 slight accidents: 2 accidents involving child pedestrians	Zebra
Harehills Ave/ Spencer Place; Chapel Allerton	630	4833	114	528	0.33		B	7 accidents - 1 serious, 6 slight; 2 involve child pedestrians	Zebra
Coal Road/ Naburn Approach; Crossgates and Whinmoor	443	5492	62	708	0.31	yes	B	None	Zebra
Deighton Road, Wetherby	249	8898	40	883	0.31		B	3 slight - no pedestrians involved	Zebra
Stonegate Road; Moortown	187	7171	40	735	0.24		B	5 slight, none pedestrian related.	Part of ELOR junction works
Otley Old Road; Weetwood	148	9702	17	1232	0.26		C	4 accidents, all slight, no pedestrians involved	Informal measures
High Street Boston Spa, Wetherby	119	8404	24	843	0.17		C	2 slight, not involving pedestrians	Refuges
Church Lane/ Parkside Road; Meanwood	232 (on all 3 arms)	18,344 (on all 3 arms)	56 (on all 3 arms)	886	N/a		C	2 slight - no pedestrians involved	Refuges

Appendix 2 - PEDESTRIAN CROSSING SITE ASSESSMENT GUIDELINES

Technical criteria

Proposed indicative PV ² value	Existing indicativePV ² value	Guidelines for appropriate crossing provision	Typical site characteristics and road conditions
Category A >0.75 (busiest 2 hours, all pedestrians)	0.85 (busiest 4 hours, usually adults only)	<p>Puffin crossing will generally be preferred for the busiest sites.</p> <p>Used at school or crossing patrol sites only where significant other pedestrian movements exist.</p>	<p>Very busy road where traffic speed >35 mph 85th percentile. Typically traffic flows will exceed 1000 vehicles per hour and over 70 pedestrian movements in busiest hours. At some sites there will be a record of pedestrian injuries. Pedestrian waiting time will generally exceed 1 minute.</p> <p>For sites are at the lower end of speed and traffic range zebra crossings will be preferred.</p>
Category B 0.6 – 0.85 (busiest 2 hours, all pedestrians)	n/a	<p>Zebra crossing will generally be preferred at these quieter sites. In some instance other informal measures may be recommended.</p> <p>May be used as part of a package of measures to assist an SCP or as part of a school travel initiative.</p>	<p>Medium trafficked road with flows typically over 700 vehicles and where traffic speed <35 mph 85th percentile. Pedestrian flows will typically exceed 40 in the busiest hours and should exceed those on adjacent sections of road by at least 3:1 thereby demonstrating a clear desire line. Most sites unlikely to have a pattern of pedestrian casualties. Waiting times up to 30 seconds and occasionally exceeding 1 minute. Some sites at the higher end of the range may be best suited to Puffin crossing control.</p>
Category C <0.6 (busiest 2 hours, all pedestrians)	n/a	<p>Informal measures to assist those having difficulty crossing the road.</p> <p>At SCP sites package of measures to assist warden or as part of a school travel initiative may be appropriate.</p>	<p>Lightly trafficked road where flows usually <600 v.p.h. provide ample and frequent gaps in traffic. No discernible pedestrian desire line nor usually a pattern of pedestrian road injuries. Minimal delay crossing road within 30 seconds of reaching it. Exceptionally a formal crossing may be justified where traffic flows are high or firm evidence of suppressed demand exists.</p>

Note: Threshold PV² values